

I am mildly fascinated that the argument was made, at any point in time, that technical writing is ideally a rhetoric-free zone. Perhaps I am having a case of 20/20 hindsight, but it seems obvious to me that a core aspect of technical communication's function is to evince an ethos of scientific authority, calling on perceived objectivity via style and language to convince readers to heed any information or instructions laid out within the writing. Culturally, we tend to accept that authority. The characters in the film *Beetlejuice* may lament that the *Handbook for the Recently Deceased* with which they have been provided "reads like stereo instructions," and we may chuckle in understanding at that line, but ignoring those instructions has disastrous results. Importantly, we probably do not question that outcome. However, this is a cultural artifact, not an indication that such language and style really are authoritative.

More than that, of course, Miller argues that objectivity is a myth: "Reality cannot be separated from our knowledge of it" (p. 51). A couple of years ago I read *Through The Language Glass: Why the World Looks Different in Other Languages* by Guy Deutscher (2010). He covers several ways in which things that we often think of as indisputable may not be. We might think that the colors of the things around us are irrefutable facts, but there has been rather a lot of scholarship about color perception and language, at least some of which concludes that people who do not have a word for a color may not actually be able to differentiate it from colors close to it in the spectrum in the same way that people who *do* have a word for it can. In Japan, for instance, many shades of what we call green in English are grouped with blue; they have blue apples and traffic lights turn blue when it's time to go. That's not to say that the apples in Japan are differently colored than our Granny Smiths, but the human categories differ from one place to the next.

Going even further down the rabbit hole, I recently started reading *Amusing Ourselves to Death: Public Discourse in the Age of Show Business* (Postman, 2005). In it, Neil Postman references the thoughts of Lewis Mumford on clocks. The clock *produces* minutes and seconds in his theory and, in doing so, separates "time from human events and thus nourishes the belief in an independent world of mathematically measurable sequences" (Postman, p. 11). It can be easy to scoff at this—of course minutes are real!—but Postman points out that cultures without clocks have a deeper relationship with other ways of marking time: seasons, stars, and sun. Western culture didn't use minutes and hours until clocks became commonplace, which you'll know well if you've ever tried to decipher how long "until it's done" means in Great Grandma's famous stew recipe. I get the impression that Postman believes it was better before the "authority of nature [was] superseded," as he puts it, but I find both equally valid. It does, however, raise the question of how objective our precise language really is.

Deutscher, Guy. *Through the Language Glass: Why the World Looks Different in Other Languages*. Picador, 2010.

Miller, Carolyn R. "A humanistic rationale for technical writing." *Central works in technical communication*, edited by Johndan Johnson-Eilola and Stuart A. Selber, Oxford University Press, 2004, pp. 47-54.

Postman, Neil. *Amusing ourselves to death: Public discourse in the age of show business*. 20th anniversary ed., Penguin Books, 2005.

“Objectivity—logic, method, knowledge, truth—is what science is about; the rest is romance and special pleading.”

Clifford Geertz was discussing a potential stumbling block, as he saw it, for feminist theory within anthropology, but variations on this sentiment ring through the halls of many an academic tradition. Even as some theorists simultaneously argue that objectivity is not possible, as a scientific ideal it has haunted practitioners in the social sciences and humanities. The argument against native ethnography is essentially the same as the one against autoethnography, participant observation that falls too hard into the “participating” end of the pool, and activist research: objectivity cannot be achieved.

There is a proverb that says the fish is the last to discover water. The inherent assumption in arguments against insider research, be that an autoethnography of a business or the deep involvement of the studied in the research development, is that those too close to an issue are too close to perceive, much less evaluate, key underlying elements of the environment. There is merit in this observation; however, there is also an overt patriarchal attitude that supports hegemonic structures. Only the outsider with a position of educated remove can adequately and usefully evaluate any site. But, as I said in a paper I wrote on native ethnography several years ago, in this model the pond and its contents are not properly the domain of the fish, but of the fisherman who has the presumed exclusive capacity to appreciate them. The hegemony is so deep here, that that pond is going to need dredging.

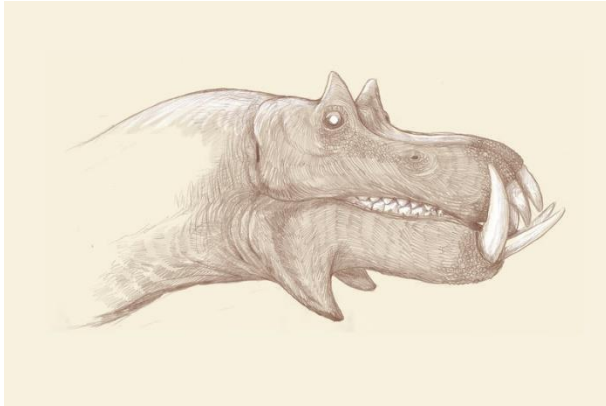
On the flip side, however, Blythe, Grabill, and Riley note that researchers should never “use” the researched for their own ends. This gets tricky. I’d argue that we are always using participants for our own ends. We can’t escape that. We can’t even get close unless we are anonymously helping from the sidelines, led entirely by the interests of the researched. If we are publishing our results, if we are seeking advancement or improvement in our own companies, even if we are just getting a grade on a graduate project, we are using the people we study for our own ends. If you can ever ask yourself the question, “Would I be doing this if I were not receiving recognition/pay/a grade?” and answer yes, then you are a saint and I commend you, without any sarcasm whatsoever. But that’s not the reality for most researchers. In my opinion, the saving grace is what other benefits come from it; for example, the author may be published, but she has also highlighted the plight of Latinos endangered by inefficient communication in construction workplaces and hopefully brought material improvement to a group through her research.

It's important that we acknowledge our positioning within any research. Kirin Narayan says that knowledge "is not transcendental, but situated, negotiated, and part of an ongoing process." Consciously and unconsciously, we as researchers negotiate an understanding of a site and the processes that make up any given situation *with the researched*. We build answers through interaction. If we recognize that, we can take steps to authentically bring us closer to either an honest dialog or a directed result that benefits in intended ways—whichever we've set out to accomplish—and steer ourselves away from the idea of the privileged academy and its "right" to "objectively" decide how to explain the lived experiences of the people we research.

Blythe, Stuart, et al. "Action Research and Wicked Environmental Problems: Exploring Appropriate Roles for Researchers in Professional Communication." *Journal of Business and Technical Communication*, vol. 22, no. 3, 2008, pp. 272-298.

Geertz, Clifford. "On Feminism." *Life Among Anthros and Other Essays*, edited by Fred Ingels, Princeton University Press, 2010, 101-111.

Narayan, Kirin. "How Native Is a 'Native' Anthropologist?" *American Anthropologist*, vol. 95, no. 3, 1993, pp. 671-686.



A hippo, reimagined in paleoart style based on its skeleton,

by C.M. Coseman

I have a friend who loves dinosaurs, and I mean that in a mildly obsessive way. But every time you show him a picture of one he says, “Not enough feathers.” I’ve always laughed, but then I saw an article on AtlasObscura about the weird world of paleoart and the assumptions that artists have to make about their long-dead subjects. Paleoartists are generally given descriptions based on a skeleton (or most of one). Maybe they have a partial fossil that shows some hair or feathers, but mostly what they have to go on is what has come before. We all have that mental

image, our Platonic ideal of “dinosaur” that pops up in our minds when they are mentioned. Every four-year-old knows what dinosaurs look like, right?

The final results—found in board books, blockbuster movies, and museum displays—are “a product of training, skill, and audience awareness” (Ross, 2017, p. 147). Artists train in paleoart, the accepted ways to interpret fossil remains. We presume their skill in doing so, particularly if we see their work in, for instance, a Smithsonian museum. But audience awareness is where our two articles intersect.

We the public have certain expectations about dinosaurs. Like I said, we “know” what they look like. Most of this image has to do with lizard-like skin, bared teeth, and fierce claws. Watching Jurassic Park, we see the leaves rustle, hear the cow scream, and we don’t need to see the monster to imagine what’s coming. And it is a monster. When Ross talks about cultural expectations shaping illustration, this is what I think of first. And even though science has evidence now of hair or feathers, these new images have been slow to overtake the old. So many of the images we still see are actually accommodations, careful not to stray too far from our expectations lest we reject them.

All of this is interesting to me particularly in light of Fahnstock’s assertion that scientist-authors downplay the uniqueness of their findings in order to make them “more plausible” to potentially skeptical peers, while accommodators play up rarity or uniqueness to increase the wonder in a lay audience (p. 336). I identified with this immediately; it was one of those many perfectly obvious things that I’ve never really thought about, but once it was pointed out, I

didn't know how it had never occurred to me. But in the case of paleoart, I see the opposite, more closely aligning to the vision of culture defining norms found in Ross.

This is complicated, of course, by the fact that the paleoartist must "fake reality." Unlike the examples in which scientists have deliberately manipulated art in order to more clearly make a point or make the collection of data easier, there is no factual recourse in paleoart, no photograph that we can compare to see what it "really" looked like. The next best thing, it seems, is audience expectation.

I am left with a question, though. Why doesn't "wonder" work the same way in this case? If, as C.M. Kosemen (the artist featured above) imagines, dinosaurs could actually be portrayed with wattles or other soft tissue that wouldn't have made it into the fossil record, then why is it presumed that we wouldn't accept them? Why do popular representations of dinosaurs not capitalize on the wonder of a new imagining?

Fahnestock, Jeanne. "Accommodating Science: The Rhetorical Life of Scientific Facts." *Written Communication*, vol. 15, no. 3, 1998, pp. 330-350.

Grundhauser, Eric. "The Bad Hair, Incorrect Feathering, and Missing Skin Flaps of Dinosaur Art." *Atlas Obscura*, <https://www.atlasobscura.com/articles/dinosaurs-art-paleoartists-mistakes>. Accessed 17 November 2017.

Ross, Derek G. "The Role of Ethics, Culture, and Artistry in Scientific Illustration." *Technical Communication Quarterly*, vol. 26, no. 2, pp. 145-172.